

REMARKS/ARGUMENTS

Claims 34 to 62 remain in this application. Claims 1 to 33 have been cancelled, without prejudice. None of the claims are currently amended, but are listed for the convenient reference of the Examiner.

The Abstract has been objected to for containing more than 150. The Abstract, as previously submitted contained 143 words. However, that number has been reduced by amendment.

In paragraph 5, near the bottom page 2 of the Office Action mailed February 22, 2006 (the "latest Office Action"), claims 34 to 46 and 48 to 62 have been rejected under 35 U.S.C. 103(a) as being obvious over Erb et al. U.S. Patent No. 3,932,245 (Erb) in view of Fry et al. U.S. Patent No. 4,614,680 (Fry) and Arendt et al. U.S. Patent No. 5,990,214 (Arendt).

The Applicants have discovered that, contrary to the understanding of those of ordinary skill in the art, a substrate with very fine embossing or texturing can have a wear layer applied that results in the very fine embossing or texture being carried through the wear layer. That is, the upper and lower surfaces of the wear layer closely follow the contour of the very finely embossed or textured substrate. This is accomplished by controlling the viscosity of the melt processable polymer resin, which forms the wear layer, between about 4,500 to about 70,000 poise at some temperature between 225°F and 425°F and applying the melt processable polymer resin to the very finely textured

substrate by hot melt calendaring or extrusion. The very finely textured wear layer is not obtained using other materials or other methods.

Each of the independent claims requires the textured substrate to have an area with a very fine embossing or texture, defined by a specified difference in height of about 1 mil, about 2 mils or about 1 mil to about 5 mils over no more than about 20 mils horizontal distance. None of the cited prior art teaches or suggests such a limitation.

In the carryover paragraph on pages 3 and 4 and the first full paragraph on page 4 of the latest Office Action, the Examiner states that

“Fry discloses that the configuration of the base layer can be varied as desired to provide different constructions of the decorative product of the invention (*col. 4, lines 21-24*). Furthermore, the configuration can provide different height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products (*col. 2, line 66 through col. 3, line 2*).

“Therefore, the exact texture height to vertical [sic, horizontal] distance of the surface texture is deemed to be a result effective variable with regard to the desired aesthetic effect. It would require routine experimentation to determine the optimum value of a result effective variable, such as texture height to vertical [sic, horizontal] distance. One of ordinary skill in the art would have been motivated by optimize the texture height to vertical [sic, horizontal] distance in order to create different aesthetic effect, such as differential texture and gloss levels.”

(Italics in original, citations omitted.)

First, in the carryover paragraph on columns 2 and 3 of Fry, he states that

“[t]he configuration of the wear layer 12 can provide differential height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products.”

Therefore, it is the configuration of the wear layer and not the substrate which may be optimized in accordance with the Examiner’s reasoning.

Second, the Examiner argues that one of ordinary skill in the art would have been motivated by optimize the texture height to vertical [sic, horizontal] distance in order to create different aesthetic effect, such as differential texture and gloss levels. The Examiner does not indicate what the optimized texture height is and more importantly none of the cited art, including Fry, teaches or suggests that the optimized texture would be a very fine texture. There is no motivation to optimize the texture to a very fine texture. As stated by the Court of Appeals for the Federal Circuit in In re Kotzab, 217 F.3d 1365, 1369-1370 (2000):

“Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.”

(Citations omitted.) Absent some motivation, suggestion or teaching of the desirability of selecting a very fine texture or embossing to coat with a wear layer, the present claims must be allowed.

Again, even if one of ordinary skill in the art were motivated to optimize (“make the best or most effective use of”) the texture height to horizontal distance, he would not necessarily be led to make a very fine texture, i.e. a very fine texture is not necessarily the best or most effective texture. As held by the Court of Appeals for the Federal Circuit in *In re Fine*, 837:

“The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. The Board points to nothing in the cited references, either alone or in combination, suggesting or teaching Fine's invention.

(Citations omitted.) There is no teaching or suggestion in Fry or Erb or Arendt of a very fine texture. In fact, there is no indication that a very fine texture can be achieved by the Fry process, which requires drawing a vacuum on the film 19 to form the top layer 12 (see column 5, lines 4 to 21), and which can be obtained by the present process of applying a melt processable resin to a previously very fine textured substrate. Unless the Examiner can point to some teaching or suggestion in the prior art that the process of Fry can produce a very fine textured wear layer and that a very fine texture is an optimum texture, independent claims 34, 36, 40, 42, 46 and 59, which claim specific textured height differences over no more than 20 mils horizontal distance must be allowed.

With regard to independent claims 36, 42 and 59, which require a specified viscosity of the melt processable composition, near the middle of page 3 of the latest Office Action, the Examiner takes the states that

“Arendt also discloses that the plasticizer increases the viscosity of the resin (*col. 8, lines 49-58*). Therefore, the exact viscosity of the melt processable composition is deemed to be a result effective variable with regard to the melt processing aid. It would require routine experimentation to determine the optimum value of a result effective variable, such as viscosity, in the absence of a showing of criticality in the claimed viscosity. One of ordinary skill in the art would have been motivated to optimize the viscosity of the melt processable composition depending on what type of aids were needed.”

(Italics in original, citations omitted.) However, the method of manufacture of Erb is not the same as that of the present invention. Optimizing the viscosity of the Erb process, which requires mechanically embossing the top coat covered foam layer (see column 10, lines 26 to 68), would not necessarily yield the claimed viscosity, which yields the very fine textured wear layer by applying a melt processable resin with the claimed viscosity over a previously very fine textured substrate. There is no teaching or suggestion that the optimized viscosity of Erb process is the same as for the present process. Without such a teaching or suggestion claims 36, 42 and 59 must be allowed.

If the Examiner disagrees, she is respectfully requested to explain where in the cited art there is a teaching or suggestion of forming a textured wear layer with a resin of the claimed viscosity, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, independent claims 36, 42 and 59, which require the viscosity of the melt processable composition to be between about 4,500 to about 70,000 poise at some temperature between 225°F and 425°F must be allowed.

With regard to claims 35, 37, 39, 41, 43, 45, 51, 60 and 62, which require the melt process processing aid to be a lubricant, the Examiner near the top of page 3 of the latest Office Action admits that “Fry [sic, Erb] fails to disclose that the melt processable polymer resin contains a melt processing aid.” In the next paragraph, she takes the position that “Arendt discloses a polyvinyl chloride resin for a wear layer in flooring applications (*col. 5, lines 23-32*). The resin also includes a plasticizing additive, i.e. melt processing aid, such as oils and lubricants (*col. 3, lines 11-16*).” (Italics in original.)

Contrary to the Examiner's position, Arendt does not teach a lubricant processing aid or plasticizer. The invention of Arendt is a liquid composition comprising mixtures of esters. (See the Abstract and column 1, lines 6 to 11, for example.) At column 5, lines 23 to 32, Arendt does teach that the liquid mixture of esters can be used as plasticizers for resilient flooring. However, at column 3, lines 11 to 16, Arendt teaches that "[t]he ester compositions can also be included as plasticizing additives in liquid compositions such as oils and lubricants." (Emphasis supplied.) Arendt does not teach or suggest using oils and lubricants as plasticizers or processing aids. Therefore, claims 35, 37, 39, 41, 43, 45, 51, 60 and 62 are allowable over Erb in view of Fry and Arendt for this reason as well.

Claim 47 has been rejected as being obvious over Erb in view of Fry and Arendt, and further in view of Smith U.S. Patent No. 4,312,686 in paragraph 6 on page 4 of the latest Office Action. Claim 47 is dependent on claim 46 and is allowable along with claim 46.

Claim 48 requires the melt processable resin to comprise a general purpose polyvinyl chloride resin. This is a specific type of resin that yields the claimed very fine textured surface covering. None of Erb, Fry or Arendt teach or suggest this resin. Therefore, claim 48 is allowable over Erb in view of Fry and Arendt.


In similar manner, claim 52 requires the textured substrate to comprise a fibrous material adjacent the texture surface of the textured substrate. The substrate that is coated with the wear layer in Erb is a foamed layer, the substrate of Fry is not fibrous and there is no teaching or suggestion in Arendt of a fibrous substrate. Therefore, claim 52 is allowable over Erb, Fry and Arendt.

Claim 54 requires the textured substrate to comprise a particulate material adjacent the textured surface of the textured substrate. Claim 55 requires specifically listed particulate material. None of Erb, Fry or Arendt teach or suggest a particulate material. Therefore, claims 54 and 55 are allowable over Erb, Fry and Arendt.

All of the rejections to the independent claims have been met and Attorney for Applicants submits that all the claims are in a condition for allowance. Therefore, a timely Notice of Allowance is earnestly solicited.

Respectfully submitted,

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